## Release B CDR RID Report

**Phone No** 

Date Last Modified 8/19/96

Originator Ruth Duerr

Organization

ASF

E Mail Address Ruth.Duerr@gi.alaska.edu

**Document** DSS

Data Server (DSS) Design

Section

**Page Figure Table** 

907-474-6721

**Actionee** 

**RID ID** 

**ECS** 

Review

**Originator Ref** 

**CDR** 

Priority 2

38

Release B CDR

**Category Name Sub Category** 

Subject Checksum on retrieve from archive

**Description of Problem or Suggestion:** 

Whenever a file is retrieved from the archive: its checksum should be checked.

**Originator's Recommendation** 

For example, the checksum should be checked when the data is backed up.

**GSFC** Response by: **GSFC Response Date** 

HAIS Response by: Scott Halpine **HAIS Schedule** 

HAIS R. E. J. Smith **HAIS Response Date** 8/13/96

Performing a checksum upon a file retrieval is already in the design. A checksum shall be performed whenever a file is retrieved from the tape archive for any reason. Backups are created from files in disk (RAID) cache. Prior to being loaded on to this disk cache, a file must be read from the tape archive and a checksum successfully performed. Once in cache on a redundant array of independent disks (RAID), the proper application of RAID technology will ensure that the file is not corrupted (it can recreate the file on the fly even if a disk dies), eliminating the need to automate additional checksums or perform a checksum on demand.

It should be noted that a performance impact will take place as a result of performing a checksum every time a file is retrieved from tape. Operations will have the option to perform a checksum as a part of file restore operations.

Date Closed 8/19/96 Status **Sponsor** Closed Kobler

Attachment if any

Date Printed: 10/8/96 Page: Official RID Report